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## TO FULFIL, NOT TO DESTROY.

The greatest religious revolution which the world has ever seen was that of Christianity. From the standpoint of an impartial umpire, it must be confessed that the triumph of the Christian Faith has been the grandest in history. The founder of Christianity, who died on the cross as an outlawed criminal, led the van of a new civilization. In his name kings and emperors reverently bowed and yielded to the demands of humaner ideals; while the greatest philosophers, the princes of thought, brooded over his ethical doctrines.

How can we explain the unparalleled success of Christianity? It is due, undoubtedly, to the sublimity of Christ's ethics, to the gentleness and nobility of his person, to the kindness of his heart, to the wealth of his spiritual treasures, and to the poverty of his appearance. But that is not all. Every business man knows that for success, not only ability is required, not only the solidity of one's goods, but the merchandise offered must also be in demand.

No movement in history can be successful unless it is based upon a solid ethical basis, having in view the elevation and amelioration, not of a single class or nation, but of the human kind. Yet this is not all. A revolution must be needed; it must stand in demand. No revolution will endure unless the ethical idea by which it is animated lies deeply rooted in the past.

A successful *revolution* must be the result of *evolution;* and a successful revolutionist must combine two rare qualities, an unflinching radicalism and a strong conservativism. The ideal of a successful movement must open new and grand vistas for progress, but at the same time it must be the fulfillment of a hope, the realization of a prophecy. Thus it will shed its light on the ages past, which will now be understood as preliminary and preparatory endeavors to effect and to realize this ideal.

We stand on the eve of another great religious revolution. Humanity has outgrown the old dogmatism of the churches, and a new faith is bursting forth in the hearts of men, which promises to be broader and humaner than the narrow bigotry of old creeds. It promises to accord with science, for it is the very outcome of science! It will teach men a new ethics—an ethics not founded on the authority of a power foreign to humanity, but upon nature, upon the basis from which humanity grew; it will rest upon a more correct understanding of man and man's natural tendency to progress and to raise himself to a higher plane of work, and to a nobler activity.

Science has undermined our religious belief, and beneath its critical investigations dogmas crumble away. But whatever science may undermine of ecclesiastical creeds, it does not, and will not, prove subversive of the moral commandments of religion. Science will, after all, only purify the religious ideals of mankind, and will show them in their moral importance. The most radical criticism of science will always remain in concord with the reverent regard for the moral ideal.

We believe in progress, and trust that man lives not in vain, that man's labor, if rightly done, will further the cause of humanity and make the world better—be it ever so little better—than it was. We aspire to a nobler future—and let me point out one important subject which is too often overlooked, and which is indispensable to success. The success of ideals is impossible without a due respect for the ideas which are to be displaced. The triumph of a better future depends upon a due reverence for the merits of the past, or, in other words, we must know that the new view is the outcome of the old view. The ethical religion of the future springs from the seed of past ecclesiastical religions. And if the latter appear to us as superstitious notions of a crude and strangely materialistic imagination, they nevertheless contain the germs of purer and more spiritual conceptions. And there is no doubt that the founder of Christianity is more in accord with the new rising movement than with the doctrines of his followers, who worship his name, but neglect the truth and spirit of his teachings.

When Christ preached the sermon on the mount, which contains, so to say, the programme of his doctrines, he expressly stated: "Think not that I am come to destroy the law or the prophets; I am not come to destroy, but to fulfil." This sentence contains the clue to his grand success. Christ was a conservative revolutionist. The new movement which he introduced in the history of mankind, was the result of the past; the New Testament was the fulfillment

of the Old. And so every successful movement has been, not a mere destruction of old errors, not the introduction of some absolutely new idea, but the fulfillment of the past, and the realization of long cherished aspirations and hopes.

Let us learn a lesson from Christ, and like him, let us "not come to destroy, but to fulfil."

## FROM MY ROMAN JOURNAL.

### BAMBINO-WORSHIP AT ROME.

BY MONCURE D. CONWAY.

II.

On the 15th of October, 1754, the historian Gibbon sat musing in the Ara Coeli Church at Rome. This ancient church—thirteen centuries old—occupies the site of the Temple of Jupiter Capitolinus; one of its columns came from the palace of the Cæsars; the one hundred and twenty-four marble steps in front are from the ruins of the Temple of Quirinus. Here, then, amid these relics of imperial Rome, sat Gibbon, "while the barefooted friars were singing vespers"; and in his mind arose "the idea of writing the Decline and Fall of the City." Probably one chapter in that book did more to awaken the spirit of historical scepticism than any that had appeared.

To-day—Twelfth Day—I sat musing where Gibbon sat, and a strange masquerade of antiquity passed before me. For it was the high festival of the Bambino—an image of the infant Jesus said to have been carved by a pilgrim from a tree on the Mount of Olives, and painted by St. Luke while the pilgrim was sleeping. Years ago I saw this doll at a private 'interview' given to Gen. Sherman. We were then told that this image was carried about in its coach to houses of the sick, to work 'faith-cures,' and that its fees were larger than those of all the physicians in Rome combined. Some one suggested that it would be a capital practitioner to follow an army with the ambulances. To-day I had a strong impression that the Bambino had been repainted since I saw it before, but must be mistaken, for of course pigments of St. Luke would not rust. On Christmas day the Bambino was taken from his closet and borne in procession to a large illuminated grotto, where he has received the adoration of thousands until to-day, when, after culminant ceremonies, he was borne again to his cloister. In the grotto were figures, life-size, of Mary on her knees, holding the Bambino, Joseph near by, and the adoring shepherd-kings. The ceiling was radiant with cherubs and large angels. Mary is youthful, Joseph venerable,—to heighten the improbability of his being the infant's father. The substitution of a cave for the scriptural stable, as the holy babe's birth-place, associates him with Dionysos and Hermes and other cave-born deities, but all the circumstances of this Babe-worship carry me back to the banks of the Jumna, and the infant Krishna. There the Hindus pressed on me little pictures of Krishna,—the word means 'tinged,'—as here they sell me penny pictures of the 'tinged' Bambino. But I must not go into comparative mythology. Across the church, in front of the grotto, a little stage is erected. Here, not so many years ago, children were wont to perform little dramas, showing forth the miraculous works of the Bambino; now they only make little speeches, the most dramatic exercise being an occasional dialogue between two. The children's ages range from five to twelve. They are children of the poor, and repeat speeches put into them like phonographs. One describes the splendid jewels with which the Bambino is decorated from head to foot; there is no intimation that these jewels—presented by the wealthy in more credulous times—might save his pauper-worshippers from more suffering than his medical potency can heal. A little boy threw kisses at the Bambino; a little girl told how happy his mother must be. Now and then when the small speakers lost the thread of their discourse, or spoke the wrong word, there were bursts of merriment in the crowd, making a strange antiphone for the Franciscans singing at the altar. However, merriment was the order of the day, and tin-trumpets were sounding on the great stairway outside.

Around the arch of the grotto are many small pictures—daubs rather—put there by worshippers who believed themselves healed by the Bambino. These represent varieties of accidents from which they were saved,—men under cart-wheels, women falling down stairs, children pitching out of windows. In the corner of each picture is seen the Babe and his mother, suggesting to the incredulous that with such proximity they might as well have prevented the accident. But then how could the Bambino be supported and enriched? And, by the way, I found in an adjoining altar a curious suggestion of antiquity. This is an altar under the special patronage of St. Anthony. In front of it is written, *Si quæris miracula*—to which one naturally adds *circumspice*. Over the remains of Sir Christopher Wren in St. Paul's, London, is written *Si monumentum quæris, circumspice*—if you seek his monument, look around, that is, at the cathedral he built. This altar inscription invites us to find St. Anthony's miracles by looking at the votive pictures reporting them—pictures resembling those around the grotto, except that, instead of the Bambino, in the corner of each appears St. Anthony bearing a lily (symbol of his chastity.) Now, I could not help suspecting that in this most ancient and plebeian church, there was here a survival of the time when these altars were competitive. Here again my memory went back to India,

where, at religious festivals, I saw worshippers of different gods and goddesses clamorously soliciting patronage for their own shrine. I have been pulled one way towards Jaganath and another towards Krishna,—being expected to buy a token at the one I went to. Thirteen centuries ago these saints and images were not so harmonious as now. The festival day witnessed a grand bazaar, in which each priest vociferated the miraculous advantages of his own altar. Between the St. Anthony altar and the Bambino is set the throned marble figure of Pope Paul III, to remind us of the all-comprehending sway under which these competing stalls of the Holy Fair were made coöperative.

This old mitred Pope looked very grandfatherly with the children climbing all over him to get a better look at the grotto ceremonies. There was wild excitement when, at about a quarter past four, the long procession in blue gowns, bearing yard-long candles, moved slowly through the church, chanting. When the grotto was reached a priest in richly embroidered robes ascended and took the Bambino from Mary, whose upheld hand with stretched out fingers remained rigidly where the Babe's head had been supported. I noticed that the Bambino was preceded by a white-and-gold banner in the centre of which was a picture, apparently of St. Anthony—this precedence possibly the result of an ancient compromise between the rival altars. In the procession moved hundreds of priests, and it was wonderful to see these gray men, with spectacled eyes, some with scholarly faces, following this decorated half-yard of painted wood. The Bambino passed under my eyes. Its smooth painted face, staring eyes, golden crown; its white swathing clothing, enclosing the legs and feet in one mass—as is the custom among Italian peasants; impressed me as make-up in a solemn comedy. I could not help thinking of Tieck's tale of the leather effigy vitalized by a shooting star, and wondering what story this staring wood would have to tell should it suddenly be animated, and made more advanced in years. Now it appeared amused with what was going on. The procession marched with it out of doors, where the last splendors of the sun were shining on a thousand bowed heads, and marched round the church again. And now I noted something that may have been mere coincidence, though I suspect not. When they came in from the open air the last time,—by a door facing the west,—it was exactly as the sun was disappearing. I will not say the sun was setting—it might only have gone behind houses—but the Bambino was held up outside the door in its last apparent ray, and at that moment the long file of processionists in advance, knelt along the middle aisle, turned their faces toward the Bambino and the fading light, and crossed themselves. Here again I resist the temptation to enter on solar mythology, and pass on to my story. Which indeed is nearly ended. The Bambino was borne from the fading sunlight at the west to the high altar at the east, and there, amid waltz-like music of the organ, and alternate singing of priests and people, shone for a moment, then disappeared in clouds of incense,—to be seen no more until next Christmas.

As the tall altar candles were extinguished, I turned to leave. It was slow work—so vast was the throng,—and I had opportunity to observe the crowd. The mass was of poor Italians, but a large majority of the well-dressed were English, Germans, and Americans They bowed to no altar as they passed, nor crossed themselves, nor touched themselves with holy water. Is this old Bambino festival, like the Oberammergau Passion Play, kept up by and for protestant tourists? At our hotel there are a few wealthy Catholics, and I observe that they rarely go to these antiquated church-spectacles, and some even betray a certain irritation at our interest in them. Are they growing to be ashamed of them?

I found I had lost a little package of pictures,—of the Bambino, St. Michael with Satan underfoot, etc.,—and returned into Ara Coeli to find them. The grotto was dark, the altar candles extinguished, but by the light of one ever-burning lamp I distinguished a person leaning against the famous pillar from Cæsar's palace, marked *Ex cubiculo Augustorum*. He was a quaint figure, in knee-breeches and powdered wig, and seemed to have been making notes in a little book. He said to me in good English, 'Have you lost something?' 'Yes,' I replied, describing the little package. 'Ah, give me your address, and if I find your lost pictures you will receive them.' 'Thanks,' I said, giving my card, 'and will you give me yours?' I glanced at his card—could my eyes deceive me? 'What means this,' I cried, 'are you a descendant of the historian Gibbon?' 'I am the historian himself. You see when I got to the gate of heaven St. Peter said he didn't entirely like my views of Roman history, and directed that I should return to this church, where my work was begun, and spend a hundred years studying it over again.' 'But is it not a dreadful Wandering Jew kind of doom?' 'Why no, I rather like it; and in truth I find St. Peter wasn't far wrong in wishing me to revise my impressions.' 'If it isn't boring you,' I said, 'I would be glad to learn your later opinion.' 'Well, to give it briefly, I find that what I called a Decline and Fall was really a moral ascent. The Capitol had been superb, but founded in cruelty, the proud palace of the Cæsars in oppression, the Temple of Jupiter in the principle of arbitrary authority. Their crumbled walls—symbolizing the Fall of Rome—went to build this church, which was dedicated to *Santa Maria in Capitolio*. In other words a woman's heart was conse-

crated in the citadel of heartlessness. Then there was an ancient dream of the lowly that the lion would lie down with the lamb, and a little child should lead them. The Bambino is a rude memorial of that little child, who led captive the lion of Roman power which had fed on the lamb—on the weak and innocent. These things have petrified now—they are fossils—but a student must not despise fossils. That was my error. And these superstitions,—are they not better than the gladiatorial combats in yonder grim Colisseum, and the victims that once bled on altars where we stand?'

At this moment the Sacristan, who did not appear to see my interlocutor, pointed me to the door, and my interview with the historian ended just as I was about to argue with him concerning the cruelties of the Holy Empire.

ROME, 1890.

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## THE PSYCHIC LIFE OF MICRO-ORGANISMS.

BY GEORGE J. ROMANES.

I WILL add a few words to this correspondence, because, from what M. Binet has now supplied, it appears to me that his "point of view" has been fully cleared up.

Briefly put, he expressly abolishes distinction between physiology and psychology. Therefore, as he tells us, while writing his book on the "*Psychic* Life of Micro-Organisms," he "set aside the question of consciousness"; and adds, "I do not know, and no one in my judgment, can know, whether the Micro-Organisms are conscious or not of their highly complex physiological acts." In other words, the Micro-Organisms do not fall within my "Criterion of Mind": they yield no objective evidence of consciousness, and hence M. Binet and I appear to be in full agreement on all points, save that of the appropriateness of using psychological terms while dealing with physiological facts. If he does not know, and does not believe he can ever know, whether his Micro-Organisms possess even the faintest rudiment of consciousness (and, *a fortiori*, of emotion or intelligence), it becomes but a meaningless—though a most misleading—performance to write a book which professes to show that the Micro-Organisms present "the majority" of the emotional and intellectual faculties which characterize the higher mammalia. No doubt it is most desirable ever to remember that psychological states are correlated with physiological, but hopeless confusion must result if we expressly confound the two things. If, for example, we say, as M. Binet now says, "Fear is an especial physiological state, which may or may not be accompanied with consciousness," we are merely discharging from the word "Fear" every vestige of its distinctive meaning. Fear is not a physiological state, even though it be true that it is always *expressive* of a physiological state. We might as well say that a high sea is an especial aërial state, because it never occurs without an aërial tempest.

By thus intentionally confounding the subject-matter of one science with the subject-matter of another, we should merely be obstructing progress in both, and I cannot help thinking that if M. Binet had occupied himself more with purely physiological research, and less with his investigations into comparatively abnormal psychology, he would have seen this for himself.

For example, when, as now, he speaks of so-called "unconscious judgments" as if the term were not metaphorical, but really "scientific," see what it leads to. "Plainly, this is a psychological terminology applied to phenomena that are (perhaps) purely physiological. But what is the harm?" The "harm" is that the "terminology" involves a contradiction in terms. In as far as judgment is judgment it cannot be unconscious—any more than shadow can be sunshine, or a living body a dead one. We cannot indeed have shadow without light, or life without a body; but this does not prove that shadow *is* light, or that life *is* a corpse. And the contrast between consciousness and no-consciousness is even greater than that between light and shadow, or that between life and death. For it involves the difference between existence as extended and not extended, as physical and not physical, as material and not material. Therefore, I say, to confound the subject-matter of psychology with the subject-matter of physiology, is to invite "harm" even greater than could arise by similarly confounding the subject-matter of any other two sciences whatsoever. Therefore, also, the very difficulty which unfortunately arises in determining the boundaries between these two sciences,—or in assigning the place at which physics begin to become associated with psychics,—appears to me to constitute the best of reasons why we should clearly recognize the great distinction that there begins to emerge, since it is unquestionably the greatest distinction that falls within the range of human experience. And, in my opinion, no better illustration could be given of the "harm" which arises by refusing to entertain this great distinction, than is furnished by M. Binet's book. For this book really serves to emphasize the impossibility of studying the phenomena of mind on their physiological side. Take, for example, the following statement of his position. "I do not allow the contention of Mr. Romanes, that such an employment [i. e., transposition] of terms is not a scientific one; for everybody is competent to translate the words 'unconscious judgment' into their equivalent which is this: 'the material process that accompanies judgment when judgment is conscious.' This point

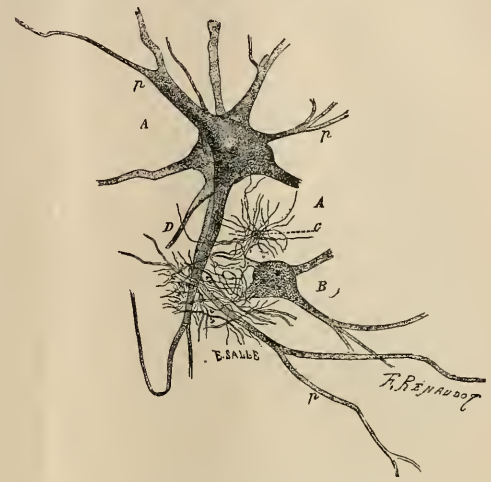
postulated and thoroughly grasped, it is conceivable how we may undertake the same task with regard to all psycho-physiological functions. This is the work I sought to accomplish in the case of the Micro-Organisms." Well, observe the result of this attempt. On account of their performing certain adjustive movements, M. Binet, as we have seen, ascribes to these creatures the majority of emotional and other psychical processes which occur in the higher animals. Yet these Micro-Organisms present no observable nervous system; and, in view of their methods of multiplication by fission etc., we must conclude that they cannot possess any such system. On the other hand, we know that the material processes which accompany judgment, or any of the other mental processes which M. Binet ascribes to the Micro-Organisms, are elsewhere material processes which take place in the nervous system. Therefore, even if we allow (for the sake of argument) that all these mental processes do occur in these organisms, it is perfectly certain that the material processes which accompany them cannot resemble those which accompany the same mental processes as these occur in the higher animals. So that here, at all events, *nobody* "is competent to translate the words 'unconscious judgment' into their equivalent": the equivalent (supposing that there be an equivalent) must be totally different in the two cases, even from the purely "objective point of view."

I cannot see that M. Binet's recapitulation of his objection to my definition of instinct invalidates the answer which I previously gave, if only the whole definition be quoted (he only quotes the half). Briefly stated, I regard instinct as reflex action *which is conscious of its own performance.* From this it follows, as previously stated, that in particular cases we are often unable to say whether a given action is reflex only, or likewise instinctive. But it does not follow, as M. Binet's objection asserts, that instinct, when it is present, "is incompatible with the idea of consciousness"; for the fact that in any particular case we have not the means of proving the presence of consciousness, is no proof that consciousness is not present.

LONDON, Feb. 16, 1890.

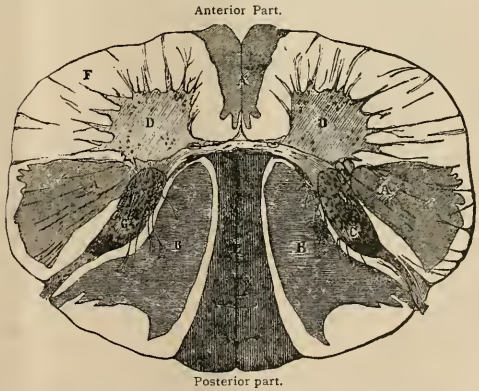
## THE SPINAL CORD AND MEDULLA OBLONGATA.

THE nervous system is built up of (1) nervous substance and (2) neuroglia. Nervous substance consists either of ganglionic cells or of nerve-fibres, the latter being processes rising out of ganglionic cells. Neuroglia, the nervous bindweb, is as it were the framework which supports the nervous substance. The membranes which envelop the ganglionic cells and the sheaths which encase the nerve-fibres and nerve-bundles are neuroglia; and besides these comparatively strong ligaments there are most delicate neuroglia-cells which in outward appearance resemble heaps of burs thickly crowded about the ganglionic cells and nerves, and filling the spaces between them.




NERVE CELLS FROM SPINAL CORD. (After Ranvier.)
*A.* and *B.* Ganglionic cells.
*C.* Neuroglia cells.
*D.* Axis cylinder.
*p.* Protoplasmic process.

The spinal cord is a long tube of nervous substance supported by neuroglia, having comparatively thick walls. Its cavity has almost disappeared. The gray




TRANSVERSE SECTION OF SPINAL CORD. (Reproduced from Charcot.
*A'.* Columns of Türck (direct pyramidal).
*A. A.* Crossed pyramidal tracts.
*B. B.* Posterior root zone (Burdach's column).
*C. C.* Posterior horns.
*D. D.* Anterior horns.
*E.* Column of Goll.
*F. F.* Anterior root zone.

matter of the spinal cord appears when viewed in a horizontal section to be arranged in the shape of cres-

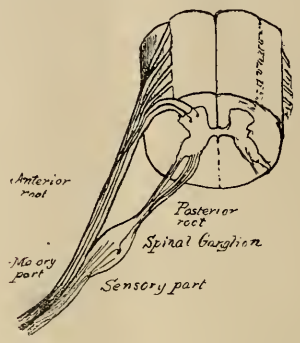
called the anterior and posterior horns. These parts contain the ganglionic nerve-cells. The white matter consists of fibres which stand in connection with the gray matter of the horns. These fibres lead up to, and arrive from, the different parts of the brain. The nerve bundles coming out of the spinal cord are called *radices* or roots.


SPINAL CORD. (Cross-section after Deiters.)

*Ra.* Radix anterior.
*Rp.* Radix posterior.
*Rip.* Inner part of Radix posterior.
*Cp.* Commissura posterior (gray substance).
*Caa.* Commissura anterior.
*Cc.* Central canal.

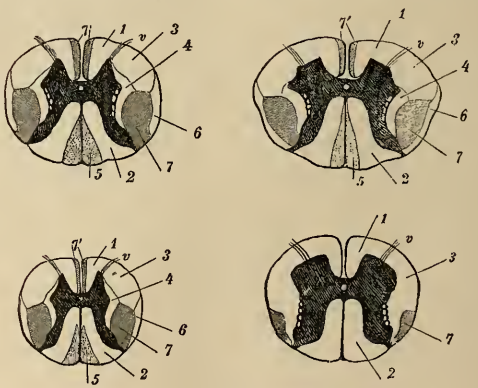
The nutrition of nervous substance takes place in the direction of its functional activity. Accordingly, if we cut a nerve, it will degenerate, in case it be motory, below, in case it be sensory, above the cut. With the aid of this law, named after the English physiologist Waller, experiments have been made (especially on dogs) with a view to tracing the directions of the different nerves. The results of the experiments were then compared with and corroborated by pathological observations.

The posterior roots have by this method been proved to be sensory. Peripherally they originate in the Pacinian corpuscles which are embedded in the mucous membrane of the skin. Shortly before entering the spinal cord they pass through a ganglion which makes the sensory fibres easily distinguishable from the motor fibres of the anterior roots. The anterior roots, or motory fibres, terminate directly in their respective muscles. The most important sensory tracts in the spinal cord to which the posterior roots lead, are Goll's bundles, situated between the posterior horns, and the cerebellar bundles situated on both sides. The most important motory centres lie (1) between the posterior horns: they are called Turk's bundles or the direct pyramidal bundles; and (2) on both sides underneath the cerebellar bundles. This motor tract is called the indirect pyramidal bundle.




SPINAL CORD.
With anterior and posterior roots. (After Edinger.)

All further details are best studied by an inspection of the adjoined diagrams.



DIAGRAMS REPRESENTING FLECHSIG'S INVESTIGATIONS.

Showing the different bundles of nervous fibres in two cervical sections, a pectoral, and a lumbar section of the spinal cord.

1. Anterior bundle of mixed nerves, paths to and from reflex centres in the medulla oblongata.

2. Burdach's bundles receive fibres from the posterior horns and lead them through the corpus restiforme to the vermis of the cerebellum.

3 and 4. Lateral bundles of mixed nerves being (like 1) paths for centres of reflex motions in the medulla oblongata. 3 and 4 contain some sensory fibres, originating in the posterior horns.

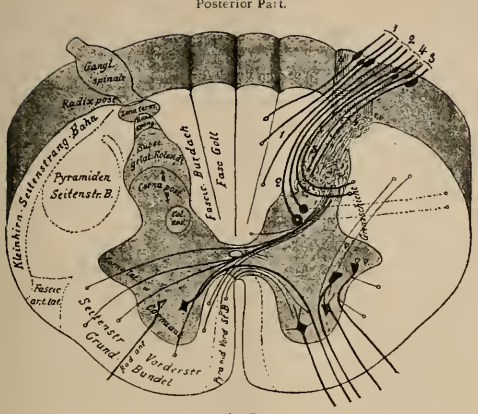
5. Goll's bundle, ascending nerves, which can be traced to the gray nuclei in the funiculus gracilis of the medulla oblongata.

6. Cerebellar fibres, pass through the corpus restiforme and connect the posterior borns with the cerebellum.

7. Pyramidal bundles. Indirect or decussated tract.

7. 1. Direct pyramidal bundles.

*v.* Anterior roots.

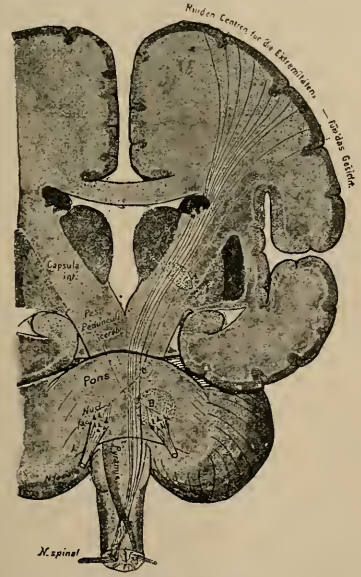



TRANSVERSE SECTION OF THE SPINAL CORD. Reproduced from Edinger).

The diagram represents the course of various fibres: sensory nerves (1, 2, 3, 4) entering the posterior horns; motory nerves passing out from the anterior horns; and commissural fibres, bringing certain gray centres into relation with one another.

The sensory cells are of globular, the motory cells of pyramidal form. Imbedded in the posterior horns is Clark's Column (*columna vesicularis*) which can be traced from the lumbar region up to the cervical region and reaches most probably into the medulla oblongata.

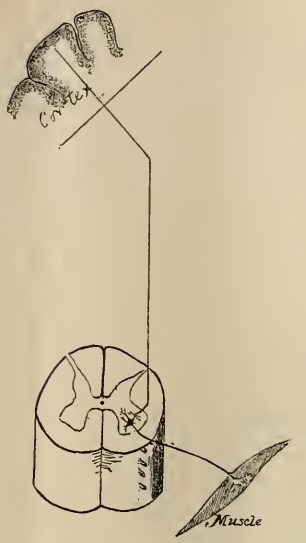
The mechanism of the sensory or posterior horns is apparently much more complicated than that of the anterior or motory horns. Between the gray cells and the marginal layer, (called by Lissauer *zona terminalis*,) there is a gelatinous substance (*substantia gelatinosa Rolandi*). Moreover all the nervous irritations transmitted through sensory fibres, have to pass through a net-work (*zona spongiosa*) in which the connection between the processes of the gray cells and their respective fibres ceases to be visible. The continuation of fibres to their cells is solely inferred from processes of degeneration.



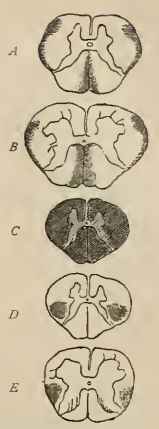

PYRAMIDAL BUNDLES AND FACIAL NERVE (Reproduced from Edinger).

The diagram shows how different situations of diseased portions will produce different effects.

A tumor in the left capsule (*A*) will produce paralysis in the muscles of the right portion of the body. A tumor in *B* will affect the facial nerve of the left side and some of the muscles in the right extremities. A tumor in *C* will affect part of the right facial nerve of the right pyramidal bundles.

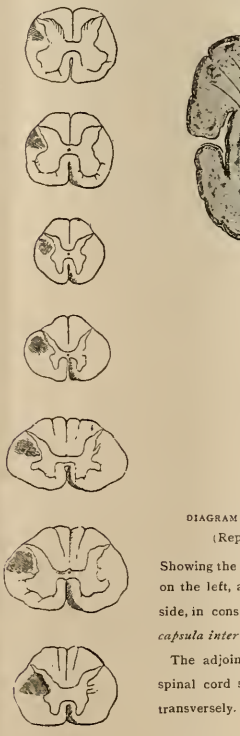



THE MECHANISM OF THE PYRAMIDAL FIBRES.




SEVERANCE OF SPINAL CORD (After Strümpell).

The spinal cord was cut in *C*. In consequence thereof we find after the lapse of a few weeks an ascending degeneration of sensory nerves (as seen in *A* and *B*), and a descending degeneration of motor nerves (as seen in *D* and *E*.)



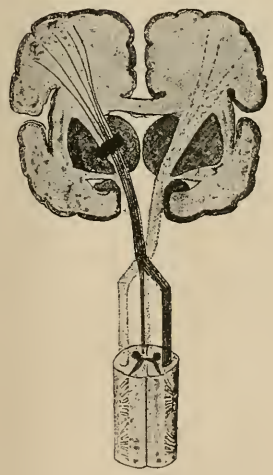
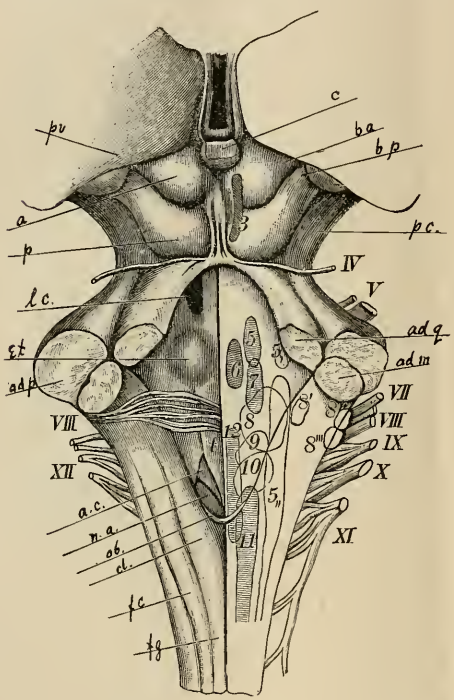


DIAGRAM OF THE PYRAMIDAL BUNDLE.
(Reproduced from Edinger.)

Showing the degeneration of the direct fibres on the left, and of the indirect on the right side, in consequence of a tumor in the left *capsula interna*.

The adjoined sections (After Erb) of the spinal cord show the same process viewed transversely.

The bulb or *medulla oblongata*, the continuation of the spinal cord, is, as the seat of the most vital reflex centres, of extraordinary importance. It is here that, with two exceptions, the most important higher nerves originate. These two exceptions are the First and Second nerves. The First Nerve (the olfactory) stands in close connection with the cerebrum or hemispheric part of the brain; the Second or Optic Nerve with the *thalamus opticus* and the optic lobes (*corpora quadrigemina*). All other nerves that are higher developed and more differentiated than the spinal nerves, have their roots in the *medulla*.




BULB OR MEDULLA OBLONGATA. (Reproduced from Landois).

*c*. Conarium or pineal gland.

*pv*. Pulvinar or cushion, i. e., lower part of thalamus opticus.

*a* and *p*. Four hills (Corpora Quadrigemina). *a*. Anterior hill. *p*. Posterior hill.

*b a*. Brachium conjunctivum anticum, i. e., tracts of nerve-fibres leading to the anterior hill.

*b p*. Brachium conjunctivum posticum, i. e., tracts of nerve-fibres leading to the posterior hill.

*pc*. Pedunculus Cerebri, nerve-tracts to the hemispheres.

There are three pairs of Peduncles on which the small brain hangs:

*ad p*. Ad pontem. Connection with the bridge.

*ad m*. Ad medullam oblongatam. Connection with the Medulla oblongata, and further down with the spinal cord.

*ad q*. Ad corpora quadrigemina. Connection with the posterior hill.

*l c*. Locus cœruleus, bluish spot.

*cl*. Clava, a club-shaped bundle.

*f. c*. Funiculus cuneiformis, being a part of a nerve-bundle called "the Rope" or *corpus restiforme*.

The following reflex centres are situated in the *medulla*, viz.: those that effect—

(1) The closing of the eye-lids;
(2) Sneezing;
(3) Coughing;
(4) Sucking and chewing;
(5) Secretion of saliva;
(6) Swallowing;
(7) Vomiting; and
(8) Contraction of the iris.

There is in addition to these reflex centres a superordinated centre, which combines the different centres among themselves so as to make complicated reflex motions possible without interference of cerebral activity. This superordinated centre is situated in the rabbit about 6 mm above the *calamus scriptorius*. Its presence is proved by experiments on decapitated frogs, lizards, eels, and also on mammals in which the *medulla* has been severed by dissection from the upper parts of the nervous system. (Proved by the experiments of Sig. Mayer, Luchsinger and Owsjanikow.)

The reflex centres of breathing seem to be of a complex nature. There are two centres in the *medulla*, one for inspiration, the other for expiration, and both are automatic. They continue to work even after the section of all sensory nerves, and depend upon the blood circulation; venous blood operating as an irritation for breathing.

Flourens has localized the *noeud vital* or centre of breathing, on both sides between the nuclei of the accessorius and the vagus nerves. But further researches

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*f. g*. Funiculus gracilis, the continuation of the clava.

*e t*. Eminentia teres. A tubercle covering the nuclei 5, 6, 7.

*t*, Funiculus teres.

*n a*. Nucleus accessorius.

*o b*. Obex. The bolt, crescent-shaped oblique fibres.

*a c*. Ala cinerea, a layer of gray substance of triangular shape. This portion of the fourth ventricle is called *calamus scriptorius* from its fancied resemblance to a pen.

The Roman numbers represent the nerves and the Arabian numbers their respective nuclei in the deeper layers of the medulla, where the nerves originate.

The first nerve is the olfactory. It enters the hemispheric part of the brain through several roots.

The second nerve is the Optic nerve which stands in connection with the thalamus opticus and the Four hills.

These two nerves do not appear in the adjoined figure.

3. Nucleus of the oculo-motor or third nerve is the main source of motor innervation in the most important muscles of the eye. The nerve passes to the front between the two crura; accordingly the nerve (*III*) is not visible in the adjoined cut. Other ocular nerves are the fourth and the sixth.

4. *IV*. Trochlear nucleus and nerve. A motory nerve going to the trochlea, the hollow of the eye innervating the muscle which makes the eye roll.

5. *V*. Trigeminus nuclei and nerve. A nerve rising from two nuclei and dividing into three branches, going to the face. It serves motory impulses as well as for the reception of sensory impressions.

6. Abducens nucleus. The nerve, because passing out in front, like the third nerve, is not visible in the cut. It is a motory nerve and innervates the muscle that moves the eye toward the side.

7. *VII*. Facial nerve. A motor nerve for the muscles of the face.

8. *VIII*. Acusticus nucleus and nerve, the sensory nerve of hearing.

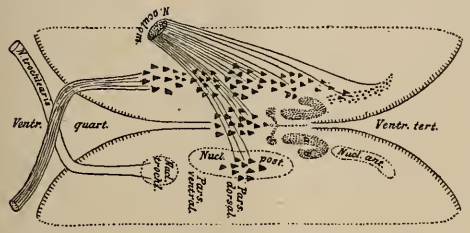
9. *IX*. Glossopharyngeal nucleus and nerve, a sensory nerve, receiving mainly the impressions of taste.

10. *X*. Vagus nucleus and nerve, a mixed nerve of motor and sensory fibres innervating the heart and the lungs.

11. *XI*. Accessory nucleus and nerve. A nerve, communicating with other nerves, having mainly a motory character.

12. *XII*. Hypoglossus nucleus and nerve. The motor nerve for the tongue, being of special importance in man because it regulates the mechanism of speech.

have proved that the mechanism of breathing is more complex still, for there are some subordinated spinal centres which even after the section of the *medulla* keep up certain motions in the thorax. (Proved by Brachet, Lautenbach, Langendorff, and Landois.) Besides some superordinated centres have been discovered in the posterior hill of the *corpora quadrigemina* (by Martin and Booker) and in the *thalamus* on the bottom of the third ventricle (by Christiani).




THE NUCLEI OF THE THIRD AND FOURTH OR OCULO-MOTOR AND TROCHLEAR NERVES. (Half diagramatic, after Edinger.)

Showing the complexity of the mechanism in the origin of nerves. *a* and *b* are two gray hook-shaped nuclei, the connection of which with the oculo-motor is as yet uncertain.

The action of the heart is regulated chiefly through the *nervus vagus* and *nervus sympathicus*. There are inhibitory as well as accelerating fibres. An irritation of the vagus produces a decrease of the activity of the heart, while an irritation of the first pectoral sympathetic ganglion produces an acceleration. This part of the nerve was accordingly called *Nervus accelerans cordis*.


The reflex motions of the *medulla oblongata* may, but need not be connected with consciousness; they are of a higher and more complex order than the direct reflex motions of a simple ganglionic mechanism and are represented in the adjoined diagram.

The *medulla oblongata* may be considered as the seat of the vegetative soul; since a destruction of its most important centres will always cause instantaneous death.

The *medulla oblongata* possesses to some degree the faculty of adaptation to circumstances as has been proved by the famous frog-experiment. A decapitated frog in which the spinal cord and *medulla oblongata* are preserved, all higher centres being severed, will scratch itself with its right leg, if irritated on the right side of its back. When the right leg is amputated, it will after a few vain attempts with the stump, try to remove the irritant by means of its left leg.

This experiment proves that the soul does not dwell in one part of the nervous system alone; but that every part is endowed with soul-life. Every ganglion is a seat of soul-life. The activity of every reflex centre is no mere physiological phenomenon. The lowest reflex centres of irritable substance possess the power of adaptation to circumstances; the *medulla oblongata* being a higher, a superordinated and more complex centre, possesses this in a greater degree than simple ganglions. Yet there is one further step needed for changing irritability into distinct and definite feeling. This is created through the possibility of comparing the present irritation with the memories of former irritations—not only of the same kind, but of all kinds. Such a possibility is established in the brain, which is the coördinative organ of soul-activity.

The brain is a storehouse of all kinds of memories. All irritations received in the peripheral sense-organs are, as it were (to use Meynert's expression) *projected* into the hemispheres. There they leave traces or vestiges: every different impression leaves a vestige of its own; and these vestiges are living memories, pictures of impressions, i. e., structures of a special form produced through irritations of a special form. These memories are so to say deposited in the brain and represent the outside objects through contact with which they have been produced. Being representative of things or of natural phenomena they are symbols of the surrounding world and make cognition possible.

The mechanism of the brain is so arranged that all the different memories are properly interconnected thus making a comparison among them easily possible.

P. C.

## CORRESPONDENCE.

### A JOURNALIST'S CONFESSION. BOSTON, 2001.

DR. LEETE'S ANSWER TO JULIAN WEST.

(COMMUNICATED THROUGH S. SCHINDLER.)

*My Dear Julian:*—Your last letter, although I noticed therein your ill-hidden feeling of disappointment and the pain which the failure in your journalistic enterprise has caused you, made me rather smile than grieve for you. I hope, dear Julian, that you will pardon my apparent lack of sympathy, and if you will accept from me a fatherly word, there may be a chance that the wound which your pride has received may soon heal. The short and long of your letter is that, although at your time you had never received a journalistic training, you have ventured to enter upon a journalistic enterprise even before you had made yourself thoroughly familiar with our present conditions, and that you have failed. Owing to your marvelous appearance among us, we gave you something to do which we thought would meet with your taste. We thought that as a teacher of ancient history and especially of the history of the nineteenth century, you might do some good to the community and thus give an equivalent for the support the community grants to you. Yet, before hardly a year has passed by, before you could have hardly familiarized yourself with the needs and wants of our present time you have had the presumption—pardon the harshness of my expression—to criticize us and to teach us what we ought to do. Again, owing to the sensation which your sudden appearance among us had created, quite a number of good-natured people were found ready to subscribe for

the *Trumpet*, as you pleased to call your paper. Good-naturedly they were satisfied to give you a chance and to hear what you had to say to them. If you had ever considered it worth your while to ask me about it, I would have told you to leave well enough alone; I would have told you that as little as an Indian, at your time, could have been made a member of your civilized society by merely taking him from the prairies and dropping him into the streets of Boston, so little can a person that has been reared in different conditions and under the former system of individualism at once comprehend our social conditions, sympathize with them, and appreciate them; I would have told you that first of all you ought to learn the A B C of journalism; I would have told you that, although every one of us has indeed the right of expressing his opinion, nobody must think that his opinion is the *ne plus ultra* of human wisdom or that after he has expressed it the whole world must at once become convinced of it. If you then had heeded my advice, you would have escaped the ridicule that always attaches to failure and the consequent pain caused by the disappointment. You did not ask me, but you went to work, got up a subscription-list and began to issue the paper. What kind of a paper? A journal after the fashion of the last century and not after the fashion of ours. Would you have expected in the year 1890 a paper to flourish that was issued in the style of the year 1790? This misplacement of time which we all find quite natural in you has been the sole cause of your failure. I do not wonder that the journals as we have them do not suit you, and that therefore you desired to establish one that would suit your taste better; but you forgot that the style which would suit you because you had become accustomed to it must not necessarily suit everybody else.

At your time, a paper contained four distinct departments.

1. The department most interesting to the public was the news department. People wanted and needed to know what has happened all over the world; and many more things did happen then than do to-day. At your time, columns of a newspaper were filled with the description of crimes that had been committed, of wars that were waged; to-day nothing of the kind occurs. At your time, people wished to be informed what the members of the aristocracy or the plutocracy were doing, how they amused themselves, what dresses the rich ladies wore, what summer resorts they were seeking, etc. Who would care for such trash to-day? At your time, the quotations of the market, the rising and the falling of stocks had an all absorbing interest. It was necessary for every business man, for every manufacturer, for every capitalist to know whether gold has gone down one point or silver has risen; to-day we have no exchange, money has ceased to be the pendulum on the clock work of human society and such events do not occur. Whatever remains as "News" and what is of interest to the public is supplied by the "National Bulletin."

2. The second department of your newspapers and the one which interested the editors and the stockholders most was the advertising department. Your pronounced individualism and the spirit of competition which arose in consequence of it made it a necessity to push oneself before the eye of the public; "Don't care for anybody else but buy from John Jones," was the tenor of all your advertisements. If people had something to sell or if they wanted to buy an article; if they were seeking help or were wanting employment they had to make use of the advertising columns of your newspapers. This, of course, does not apply to us. Whatever articles a person wishes to purchase, he can find in our distributing department and whatever help is to be employed, can be obtained at the National Employment Bureau. There being no demand for advertising columns the supply of course has ceased.

3. The third department of your newspapers was the belletristic department. It reached its highest development at the close of the last century. There was not a newspaper in the land that would not supply its readers with stories of all kinds, mostly of a sensational nature. The novelists who wrote for a journal were told that they must not write stories that contain more than about 40,000 to 50,000 words, that after every 2,000 words the reader must be kept in suspense in order that he may be induced to buy the next paper, which was to contain the continuation. This kind of newspaper literature flourished because people had absolutely no time to sit down and read a book. If they intended to feed their imagination they had to snatch away a moment here and a moment there; this want the newspaper supplied. People could read such a story while they were riding in the street cars, or while they were eating their luncheon. As every person was obliged to buy a newspaper anyway, if he wished to be informed of the occurrences of the day, the novel which he bought with the paper did not cost him anything extra. All this is changed to-day. We have our comfortable libraries, we have sufficient means to buy a book that we wish to own, and what is more, we have the time to read it carefully. Your newspapers struggling for existence were obliged to cater to the public taste and to embody in their columns all that might induce people to patronize them. In our days, it would be considered absurd to cut up a story into a number of daily or weekly installments. You complain that you were obliged to reject a story that was sent to you for publication on account of the tendencies which it contained and which ran counter to the supposed sentiments of your patrons. I am astonished that a person was found indeed who would endeavor to publish a literary production in this way and I am rather inclined to think that the writer, knowing your antiquated ideas of newspapers, merely wished to pass a good joke on you.

4. The fourth department of your newspapers was finally the editorial department. The editor made use of his opportunities and offered to his readers his comments and opinions on all matters of public interest. You were accustomed to be awed by authority and the editorial of a newspaper of large circulation was not taken as the opinion of the one man who wrote it, but as the expression of the public itself. Again, because you had no time to consider carefully a topic, the editorials, at your time, had to be short and brisk. The government, furthermore, was always supposed to stand in opposition to the public will, even when chosen by an overwhelming majority of the people; the administration was always looked upon with suspicion, and fault was found with almost every step which a president or a governor took. If officials pleased a certain party, they could be sure to displease the other, and thus as each party had its organ, the editorial columns were devoted to a constant warfare for or against the government. At your time, this was not more than natural, because every act of the government needed careful watching, inasmuch as individual interests were at stake. The suspicion was always near that the motives of an administration were sordid, and that having come in possession of power he would use it to enrich himself at the expense of others. All this has been changed, our officials are not suspected, they are rather honored, admired, and their work appreciated by the public. They need not to be watched, because although the wealth of the whole country is in their hands, they cannot make more use of it for themselves than you can or I. The trouble with you, my dear Julian, is that your ingrained individualistic tendencies are still blinding you and that on account of your early education you cannot understand how a government should not need the watching or the criticism of the press. What was a necessity and a very good thing at your age has ceased to be so in ours. If some of us think that he has a suggestion to make he can do so by bringing it to the notice of the superior officer, through whom it will reach headquarters, or if he thinks that his propositions have not received the proper attention he can publish what he has to say in pamphlet form. If it is good it will spread without much advertising; one will tell the other, and in a short time the people will see to it that his proposed reforms are brought

about. If, on the other hand, his propositions seem good only to him and to a few others and will not strike the people as founded upon common sense, they will fall flat and be ignored.

Now, in fact, we have not got newspapers or a press as you had them, nor do we need them. We are satisfied to let you have your way, but if you have failed in your enterprise, please do not lay the blame before our doors, but see to it first whether it does not lie with you.

One more point of your letter I cannot help touching. You say, somewhat sneeringly, that a social system once instituted must be preserved at all hazards, merely because some time ago it has been created. As soon as we shall find that the social order which surrounds us ceases to be beneficial to us; as soon as we shall find that any individual or any class of individuals is unduly benefitted by it while another individual or another class of individuals is unduly debarred by it from happiness, we shall surely change it and not hesitate a moment. No, no, my dear Julian, do not borrow troubles. Behold what a glorious institution ours is! Learn by your own experience! Supposing a person would have come to you in the 19th century as you came to us, could he have found at once a place in which to make himself useful? Or, supposing that you, at your time, should have been infected with the ambition of becoming an editor, how would you have succeeded at your time without a thorough knowledge of the work? You might have undertaken the task, as did many of your contemporaries. As you were rich you could have pushed the enterprise with money, but supposing you had failed to strike the right chord, supposing that your editorials would not have met with public approbation, you would have become beggared. With the loss of your fortune you would have lost your seat on the top of the coach, you would have been compelled to take your turn on the rope and your former friends would have had no sympathy with you; at best they might have thrown to you a gift of charity. Now, although unsuccessful, you can return to the work for which you have some fitness, and after a time, you may try again to climb upon an editorial chair. Yours truly,

LEETE, M. D.

P. S. Mother and myself send love to Edith and the baby.

## THE DANGER OF ANARCHY IN THE TWENTY-FOURTH CENTURY.

HON. EDWARD BELLAMY,
Master-Workman of the Labor Army of the United States of America

*Glorious great-great-great-great grandson of the Legendary Author of "Looking Backward"!*

Please do not drop this letter into the waste-basket because it is anonymous. It calls your attention to an urgent need of the time, which if not attended to speedily may undermine our whole system of civilization.

I abhor the barbarism of former centuries and fear nothing more than a return to the wolfish state of competition which, if the report of our historians be true, prevailed during the reign of anarchy upto the end of the nineteenth century. I am anxious for the general welfare of humanity which you so generously try to promote. Yet I write this letter anonymously because I fear to be sent to an asylum for atavism, as so often happens to men who venture an opinion that happens to disagree with that of the representative men of our glorious nation.

One of my brothers committed suicide a few days ago in the asylum where he had been confined for over thirty years, after the physicians had proclaimed him a hopeless case of atavism. His ailment was the belief that our nation made rapid regresses in civilization. He had been careless enough to declare publicly that the state was run by a few bosses in Washington, who proved worse tyrants than the legendary Czar of Russia, of whom we read in our Readers. He said that he would prefer to live under a form of government such as we possessed a century ago.

The physician said that my poor brother had committed suicide from mere weariness of life. He used to say that a state of perfection like that in which we live is the most monotonous and intolerable existence possible. Nothing happens; there is no progress imaginable; there are no aims for the ambitions of a man and he would prefer the Hell of a competitive Society to the heaven of a coöperative system where there is no elbow room for individual exertion.

I pity my poor brother. No doubt he was grievously sick. But the worst of it is that the disease is dangerously spreading, even among the physicians. It must be contagious. The asylum of Chicago alone confines 124,783 patients suffering from this particular kind of atavism. The figures will soon reach fifty per cent. in our State. Happily they are excluded by law from the little voting that is done. If that were not so, our government under your glorious Presidency would soon be overturned. Yet be on your guard! Matters are growing worse every year. There is an annual decrease of the returns in the harvest, and I do not know what would become of things, if in this peaceful era our labor army were not possessed of a real ovine patience.

Congress has not met for over thirty years; and when it met last time, it decided in the truly conservative spirit that distinguishes our age, not to meet again during the next fifty years, "lest anything be done hastily."

I propose, dear sir, that Congress be convened before that time, and that a bill be passed to allow all those who suffer from atavism to emigrate into another country, for, here among us, they are a most dangerous element. They will soon form themselves into a party, and as soon as we have parties the old barbarism of party-strife will begin over again as of yore. Is not party-strife one kind of competition? Now imagine that instead of the present order of coöperation, where every man is put in his place, we should compete for our places, what a general anarchy would prevail! What would be the result, if a farmer allowed his oxen to compete as to who should draw the plow and who the dung cart; how could his farm prosper? It cannot be so among civilized humanity. Like the oxen of the farmer every man should be allotted his place and should receive as a compensation for his work food and shelter. So let it be and so let the state of coöperative humanity remain. But be on your guard lest anarchy overturn our civilization.

I remain, dear sir, your obedient servant,

CHICAGO, Ill., April, 2352. * * *

[These letters, dating from the twenty-first and twenty-fourth centuries, that have been received at *The Open Court* and now appear in its columns, are a decided progress in the mediumistic science. Our spiritualistic contemporaries have hitherto published letters from the departed only. *The Open Court* publishes letters from the generations unborn. Very well! It is a satisfactory proof that *The Open Court* is a medium through which the Spirit of the Future speaks.—EO.]

## THE MOTE AND THE BEAM.

A LETTER TO THE BOSTON INVESTIGATOR (PUBLISHED APRIL 9).

MR. H. L. GREEN, in his last letter to the *Investigator*, says:

"And I here request Mr. Carus, as a 'true Liberal,' as he claims to be, to inform the world, first, what he had reference to when he declared that 'the mote in Mr. Gladstone's eye was insignificant in comparison to the beam in Col. Ingersoll's eye.' Second, to state what *he* is doing as a 'true Liberal' in the 'positive and constructive' line of Liberalism that he would like to see Col. Ingersoll engaged in."

These are two square questions, and at once bring us to a definite issue. I shall answer both as briefly as possible, and it may be that after all we shall come to a mutual understanding.

First, the negative side of our issue. The remark about the

mote and the beam was not made in depreciation of Col. Ingersoll, whose intellectual and moral qualities I appreciate perhaps no less highly than his most enthusiastic admirers. The expression was not intended as an insult, but as a criticism; and no impartial reader, unless, like Mr. Green, he had been in a state of excitement, could have taken the remark in a different sense.

And now the positive side of my answer. All theologians are agreed upon this—that the purpose of religion is and always will remain morality. However, there are many among them (we call them dogmatic theologians) who deny the possibility of establishing the moral *ought* upon a scientific basis. Thus, they believe that a supernatural revelation is needed for the support of ethics. In this we declare they are mistaken, and their error is the mote in their eye.

Col. Ingersoll has accomplished a great work in exposing the superstitions of dogmatic religion. He has advanced the cause of humanity by clearing the ground for a purer religion. But if he goes so far as to tear down the very basis of society, if he repudiates the necessity of the moral *ought*, obedience to which is the indispensable condition of order, liberty, development of individuality, and the progress of humanity, we must declare that he blindly overlooks the most important factor in the evolution and formation of human life. Col. Ingersoll, in his love of freedom, goes too far when he proposes to sever every tie that binds us to the fulfillment of certain moral rules. As an example of the error which I criticize, I quote from Col. Ingersoll's last contribution to the *Truthseeker* on "Destructive and Constructive Liberalism" (a reprint of which appeared in the Boston *Investigator*) the following passage:

> "All religious systems enslave the mind. Certain things are demanded, certain things must be believed, certain things must be done, and the man who becomes the subject or servant of this superstition must give up all idea of individuality, of hope, and growth, and progress."

Col. Ingersoll has put his thought into words which, as they stand, would convert liberty into license, for they establish the most unbounded individualism, and deny the existence of any moral authority. That "certain things must be done," that "certain things are demanded," Col. Ingersoll declares to be a "superstition," "and the man who becomes the subject or servant of this superstition," he says, "must give up all idea of individuality or hope of intellectual growth and progress."

It is this error which I call the beam in Mr. Ingersoll's eye. It appears to me so gross an error that I cannot believe that Col. Ingersoll, when writing this sentence, comprehended its sweeping significance. Moreover, it does not agree with many other utterances of his in which he unmistakably acknowledges the supremacy of a moral law that governs the growth of human society.

The moral law that governs the development of human society is a natural law, and we know by experience that whenever it is disobeyed it will cause disorder, and consequent thereupon, misery, affliction, unhappiness, and ruin. The moral law is a thing, obedience to which *is* demanded. We maintain that its truth can scientifically be proved, and those who cannot grasp it must needs believe in it. We cannot disregard it, we cannot ignore it, but we have to conform to it. Upon a rigorous obedience to this law all individuality, all intellectual growth, all social growth, the realization of our ideals, and the progress of mankind, depend.

The recognition of the moral law as an inflexible factor, in the nature of things, is the sum total of all that is meant by the words "Natural Religion." You may call it, also, the "Religion of Science." It is a religion without dogmas, not based upon a special revelation, but upon the facts of natural laws, ascertainable and verifiable by science. The presence of the moral law is not a new dogma; it is a scientific truth, as undeniable as the law of gravitation.

What I mean by "Constructive Liberalism" is expressed in the two words: *Ethical Liberalism*. That Liberalism alone which teaches us the proper way to live, can be said to be constructive. And the rules of right living cannot be derived from our individual likes or dislikes; it is not a matter of private pleasure. The rules of conduct must be established upon the unalterable natural law that shapes human society—which being the power that enforces morality, we may very aptly call the moral law.

The clergy remain deaf to the demands of Liberalism, mainly because they are under the impression that Liberalism intends to subvert morality. And can they otherwise interpret Liberalism when they are told that no authority whatever ought to bind us, and that the pleasure of the individual should rule supreme?

Mr. Green asks me what *I* am doing as a "true Liberal" in the "positive and constructive" line of Liberalism. Every number of *The Open Court* is an answer to this question, and in every number he will find the truth emphasized that there is but one religion, and that is the Religion of Science. And particularly what I mean by the mote and the beam is fully explained in No. 130.

The tenets of *The Open Court* are fiercely attacked by dogmatic believers on the one side, and dogmatic unbelievers on the other side; but neither party has as yet succeeded in bringing forth any tenable argument against the propositions of *The Open Court*. When I declare that God, if the word God means anything, means the moral law to which we have to conform, the dogmatic believer calls me an Atheist, and imagines that this settles the question. On the other hand, when I say that the moral law (the immanent God) is an abstract idea which, being abstracted from reality, represents something real in exactly the same way as do all the natural laws, the so-called Liberal declares that I propound a mediæval creed, and attempt to reinstate the antiquated superstitions of past ages.

The abstract idea of gravitation represents something real, and we have to adjust the movements of our body accordingly. So the abstract idea of the natural conditions in which man stands to Nature, and of the sociological law that underlies all the relations between man and man, is something real; and we have to adjust our behaviour accordingly.

What humanity wants is a practical, i. e., a purely moral religion, based upon facts stated with scientific accuracy and philosophical breadth. This is the constructive work needed, which, if the churches refuse to do it, devolves upon Liberalism. This is the constructive work in which I should like to see Mr. Ingersoll join hands. Slaying dead ogres and ridiculing stories which no man of education—be he ever so Orthodox—any longer believes, is a very amusing pastime, but a man of great talents can, in my opinion, do better and more useful work. I feel confident that Col. Ingersoll is called to greater tasks.

Let me add one remark in answer to another attack made upon me in your columns.

Some so-called Christians, and also some so-called Liberals imagine that they promote the interest of their party by misrepresentations of all views which are not congenial to theirs, and they try to support their denunciations by quoting disconnected passages, the meaning of which, by a slight turn, becomes easily distorted into absurdity. Thus, one of your correspondents ridicules the idea that form is the soul of things, and that the soul of man is the form of his organism. He adds that roundness accordingly would be the soul of an apple.

In way of explanation, let me add that the form of an apple does not mean merely the outside shape, but also the inner structure, all the delicate tissues and the arrangement of its substance. Form, in this sense, is that which makes a thing the thing it is. Indeed, it is a very old truth that the soul of man is the form of the human organism. Old Edmund Spenser, the poet, says:—

"For soul is form and doth the body make."

But this truth has been overlooked and ignored, and there are even to-day many Freethinkers who have no idea of the importance of form and formal thought.

Any one who misrepresents the views of those who hold a different opinion may be a good partisan, but he does not work for the progress of mankind, and he will not enhance Liberalism. Liberalism, in my mind, is not a party, but a principle. If the Liberals are a sect I do not belong to them. The true Liberal is no partisan, but a disciple of truth. PAUL CARUS.

Chicago, Ill., March 1, 1890.

## THE BASIS OF ETHICS AND THE ETHICAL MOVEMENT.

WE are strongly in sympathy with the Societies for Ethical Culture, because among all the liberal movements of ethical aspirations they show the greatest sincerity and earnestness with regard to moral ideals. Yet there is a point of fundamental importance in which we have not as yet been able to ascertain whether we agree or disagree with them. It is the problem as to what is the basis of ethics. The solution of this problem is for every one of greatest importance, it must become the corner-stone of the ethical movement, and it is concerning this problem and its solution that we are anxious to come to a mutual understanding.

*The Ethical Record* says: "We think there is some lack of clearness as to what a basis of ethics means."

The basis of ethics is the 'reason why' man must regulate his actions in a certain way, and thus it is the philosophical foundation upon which ethics rests. The moral 'ought,' which involves that which we call good, depends upon the basis of ethics. Our definition of 'good' will be different according to the different answers given to the question, Why must I feel bound by any 'ought' or 'moral law'?

It might be maintained that a philosophical foundation of ethics is of secondary importance: the first demand is to obey the moral 'ought.' And certainly we admit that action is more than knowledge. But let us not forget that ethics if it means anything is the regulation of action conformably to some principle or maxim. The ethical man is first of all a thinking man. He acts in a certain way because he considers this kind of action as good and another as bad. What would ethical action be without the ethical principle by which we have to regulate it?

Man "*considers*" something as good, we say. But the question is not what a man *considers* as good. The question is, What *are* good, and what bad, actions? Professor Adler says: "Concerning them (the facts of moral obligation) there is a general agreement among good men and women everywhere." This is an ethics of mere conventionalism. Moreover, that general agreement is an error; for while the Spartan thought stealing without being caught was a virtue the Athenian considered it a shame. Yet Prof. Adler limits the agreement concerning these facts as obtaining 'among *good* men and women.' This would stamp everybody who disagrees from Prof. Adler, as bad; and that can scarcely be his meaning.

The answer given by *The Ethical Record* to the question, Why we should act morally? is: "We conceive that the obligation of justice and love is self-evident to rational beings" This conception of ethics would be intuitionalism, a theory which we thought belonged to the dead past.

Justice and love are admirable words, but they are too general to give a clear idea regarding what they mean. We all agree that justice and love must be the impulses of our actions. In the name of justice and love the anarchists demand the abolition of all law, the nationalists demand the removal of 'wolfish' competition, the single-taxer asks for the confiscation of land, and for justice and love charitable people feed paupers. How widely different must their conceptions of justice and love be!

The very same question as to what the basis of ethics in the ethical movement may be, is asked by every one who takes an interest in the ethical societies; and there are many outsiders besides Dr. Abbot who are deeply interested in the matter. If the ethical societies do not increase as they ought to, it is, it appears to me, because they have no definite opinion, they lack a foundation upon which to stand, they try to be broad and become vague.

The *Nation* in a long and most appreciative review of Mr. Salter's book "Ethical Religion," has made, from quite a different standpoint, the same complaint that Dr. Abbot presented. The reviewer says, after a discussion of not less than three columns:

"After all, however, the unsatisfactory thing about these excellent lectures, even regarded from the practical point of view, is just the vagueness of the author's moral theory.

"To be all things to all men is, indeed, the privilege of an apostle; but to appeal to anything and everything plausible except theology as a support to morality—is this enough? If one leaves behind what one takes to be superstitions in tradition, may not one end in making one's morality itself a superstition? And if the laymen of the Ethical Societies should chance to note such an outcome, what result could be more lamentable?"

There is no doubt that the future religion will be an ethical religion; and that which humanity wants is a new basis of ethics, viz., the why of the moral ought. Schopenhauer says "to preach morals is easy but to place it upon a philosophical foundation is difficult." *Moral predigen ist leicht, Moral begründen schwer.*

*The Ethical Record* says: "The ethical movement has taken special pains not to commit itself to the philosophical views of its lecturers." The ethical lecturers represent the ethical movement and if the ethical movement has taken particular pains not to commit itself to their views, this is equivalent to saying that it has no views whatsoever. The ethical movement, we are informed, "made a statement of its aim (in the constitution of the 'Union') after mature consideration, and expressly welcomes to its fellowship those who sympathize with its aim (the elevation of the moral life) *whatever their theological or philosophical opinions.*" How can we have a common aim in the "elevation of the moral life," if we are not agreed upon what a moral life is, if our philosophical opinions about good and bad differ? If the ethical movement welcomes people of any creed and of no creed, they cannot expect that its members will have the same or even a similar and harmonious ethical ideal.

To have an opinion and to dare to be of one's opinion; to stand up for it bravely; and in case we have not as yet an opinion of our own, to search for it and have no rest until we have found it,—this is the very first step in ethics, the most indispensable condition of ethics. The man who has a wrong opinion and holds it in good faith is more ethical than he who waives the question. How can we, when building a good house adapted to our needs, invite all our neighbors to assist us, whatever be their opinions with regard to the plan of the house, with regard to what must be understood by a good house?

Before we commence building let us have a plan. Philosophical views and also theologies are by no means mere theories having no practical value. They are, or rather they have to become, the maxims and regulative principles of our actions; and any ethics without a philosophical view back of it is no ethics, but ethical sentimentality. It is like a wanderer in search of a goal, who has lost his way and does not care to be informed about the right direction.

We maintain that dogmatic religion can no longer serve as a basis for ethics. In the old religion the "why" of the moral ought is explained by the will of God. We are told that God has spoken through the mouths of his prophets; he has revealed himself. We no longer believe in the possibility of a supernatural revelation and search for another and a natural reason why we should live morally. If the ethical teacher preaches the moral ought, every body in his audience has the right to ask the ques-

tion: "By what authority dost thou sustain this command?" If the moral ought of the ethical teacher is merely an expression of his individual opinion, he has no right to preach it to others. If he no longer believes in the supernatural God, he must give account of that God who gave him the authority to preach.

The ethical movement, as I understand it, is started because dogmatic religion no longer suffices as a basis of ethics; accordingly it must lay a new basis that will suffice. If the ethical movement refuses to do this, it has no meaning. The leaders of the ethical society should not hesitate to commit themselves to definite opinions. They should speak out boldly and with no uncertain voice. A non-committal policy in the face of other views, religious as well as philosophical, is just as good as giving up the attempt altogether.

I find that many clergymen and many Rabbis are very clear-sighted on this matter; they seem to know the needs of the time; they earnestly and judiciously work for a purification of religion. And we wish that those who profess to carry out the ideal of the present age, namely, the foundation of a purely ethical religion, should not remain behind; they should know, and if they do not know they should search for, the ground upon which we are to stand. The question, What is the basis of ethics? is of paramount importance to all of us, to the religious dogmatist, to the freethinker, and above all to the members of the societies for ethical culture. The success of the ethical movement will in the end depend upon how their leaders solve this question.

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We should be very much obliged to *The Ethical Record* if it would give us a simple, plain, and unmistakable definition of what the leaders of the Ethical Movement understand by good i. e., morally good. P. C.

## NOTES.

Among the humorous traits of the American character is our affected reverence for law, especially if "order" be coupled with it. And yet no other civilized people are so disloyal to "law and order" whenever those elements of government become inconvenient or expensive to our own particular selves, our party, or our clan. While vehemently proclaiming the duty of all others to respect the law, we reserve to ourselves the right of disobedience. We exempt ourselves by dispensation from the law whenever it conflicts with our own interests or inclinations. This indulgence we jealously deny to all our neighbors. The American maxim is: "The law was made for you, but not for me."

* * *

When a man declares by word or action that the laws of this land are not binding on him, we reprobate him as an anarchist and it is astonishing how many laws we ourselves may break, if we severely stigmatize as "anarchists" all others who do the same thing. When a magistrate, sworn to enforce the law proclaims by his official action that it is not binding on him, and when he throws police protection over those who violate the law, is that anarchy? And if not, would it be anarchy if practiced by an anarchist?

* * *

For instance, is this a phase of anarchy? April the first was election day in Chicago, and the laws of Illinois declare that whisky shops and beer saloons must not be open on that day. Under sanction of the Mayor this law was ostentatiously defied, by the connivance of all police authority in the city. It may be that the law is wrong, but that is not the question here. It is enough that it was repudiated by the magistrates who have sworn to enforce it. There are other laws on the statute books which are contemptuously overthrown in the same way.

This calm and dignified abdication of duty presents to us a few puzzling paradoxes not easy to explain, as for instance these: If a candidate for Mayor should in absolute sincerity declare that if elected he would not enforce the law, could he be elected? Surely not. And if on the contrary, he should say earnestly and be believed, that he would enforce the laws, could he be elected then? Surely not. In either case he would be defeated by any opponent who would promise to enforce the laws with a mental reservation understood by certain voting elements that in their behalf he would suspend the laws. He must promise one thing and mean another, or have no chance at all. He must recognize with due solemnity that the beer saloon is the unit of the American political system.

* * *

A few days ago the habit of official disrespect for law was brought to the notice of Congress. An honorable member offered a resolution to the effect that whereas it was reported that in certain of the United States courts the judges were in the habit of suspending sentences passed on prisoners, and whereas such suspensions were in violation of law, therefore that a committee of investigation be appointed, etc. The humorous feature of this resolution is that those unsuspecting innocents known as the American Congress have just discovered a vicious and illegal practice which has prevailed in the National courts for more than twenty years. This usurpation of the pardoning power has become a dangerous abuse of law. It is often employed as an element of tyranny and corruption. The illegal habit of suspending sentences has spread beyond the National courts to many of the State courts, and even those cold, hard, and sordid men who preside in the police courts, claim the suspending power as part of their prerogative, a perquisite which they make profitable in many ways.

M. M. TRUMBULL.

## NOTES.

We shall publish in our next number two criticisms, from the nationalistic point of view, of "Looking Forward," the leading article of No. 134 of *The Open Court*.

We shall publish in the course of the ensuing week a little book entitled "Epitomes of Three Sciences," containing the series of essays contributed during the last two years to the columns of *The Open Court* by Professors Oldenberg, Jastrow, and Cornill. They are résumés of the three sciences of Comparative Philology, Comparative Psychology, and Old Testament History. Professors Cornill and Oldenberg have written especial introductions to their treatises, and the editor of *The Open Court* has supplied a preface discussing the bearings of these three departments of investigation on the intellectual and religious problems of our day. The price of the book will be seventy-five cents. (The Open Court Pub. Co.)

*La Revue Francaise*, a monthly magazine of literature, art, and science, published in New York (39 W. 14th st.), and designed to meet the demand among American teachers and students of French for good French literature, has reached with March its third number. It resembles, although much more comprehensive in the scope of its selections and less didactic in its methods of exposition, a similar periodical in German, *Germania*, a magazine that has been noticed in our columns. We think the *Revue* would more competently serve the purpose announced in its editorial introduction by instituting a separate department devoted to instruction in French grammar and rhetoric. It might also be suggested in a spirit of friendly criticism that the sources from which the selections are taken be acknowledged, both for the benefit of the readers as well as by way of recognition to the journals in which the articles were originally published. But the *Revue* is excellent in its way; it responds to a legitimate demand, and we wish it a large circulation.